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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,306	02/09/2001	Daniel Pompei Cedrone	1246.1	6764
21176 7:	590 03/26/2003			
SUMMA & ALLAN, P.A. 11610 NORTH COMMUNITY HOUSE ROAD SUITE 200 CHARLOTTE NO. 28277			EXAMINER	
			PICKARD, ALISON K	
CHARLOTTE, NC 28277			ART UNIT	PAPER NUMBER
			3676	
			DATE MAILED: 03/26/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/780,306	POMPEI, DANIEL				
Office Action Summary	Examin r	Art Unit				
	Alison K. Pickard	3676				
The MAILING DATE of this communication app ars on the cov r sh t with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	66(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) day ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. & 133).				
1) Responsive to communication(s) filed on						
	s action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) <u>1-36</u> is/are pending in the application						
4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed.	on from consideration.					
6)⊠ Claim(s) <u>1-36</u> is/are rejected.						
7) Claim(s) 1-30 is/are rejected.  7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers	o.coo.					
9) The specification is objected to by the Examiner						
10)☐ The drawing(s) filed on is/are: a)☐ accep	ted or b)⊡ objected to by the Exar	miner.				
Applicant may not request that any objection to the		,				
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Exa	aminer.					
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14)☐ Acknowledgment is made of a claim for domestic	· ·					
a) ☐ The translation of the foreign language prov 15)☐ Acknowledgment is made of a claim for domestic	visional application has been rec	eived.				
Attachment(s)	,,					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)				

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-7, 15-24, and 32-36 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Toedt (170,314).

Toedt discloses a gravity hinge consisting essentially of an upper cylindrical knuckle A, a lower cylindrical knuckle A', an oblique bushing C, and a spindle B. The knuckles have opposing terminating surfaces that are oblique to an axis. The bushing has the same angle as the terminating surfaces and forms a continuous cylinder with the knuckles in a resting position (see Fig. 2). When rotating, the upper knuckle is separated from the bushing (see Fig. 1). Toedt discloses that the gravity hinge is used on doors of all kinds, which includes gate/fence doors. The bushing is formed of a hard metal and serves as a bearing, sliding, surface. It is considered inherent that the hard metal bushing has a lower coefficient of friction than the knuckle surfaces and is self-lubricating since it serves as a bearing surface.

Or, in the alternative, it would have been obvious for one of ordinary skill in the art at the time the invention was made to select a hard metal, such as phosphor-bronze, for the bushing as such is known to have self lubricating and friction reducing properties as evidenced by McKinney (1,076,689).

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Regarding claims 3, 6, 20, and 23, the spindle is considered integral to the knuckles in that it is connected to form one piece.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 10, 11, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toedt in view of Douglas (3,733,650).

Toedt does not disclose a bushing having a cylindrical sleeve that is received in at least one of the knuckles. Douglas teaches a hinge comprising upper and lower knuckles, a spindle and a bushing 10. The bushing comprises a sleeve that is received within the lower knuckle. Douglas teaches the sleeve is used to prevent metal-to-metal contact and allows the spindle to rotate smoothly. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make the bushing of Toedt with the sleeve that is received in the knuckle as taught by Douglas to prevent metal-to-metal contact and allow the spindle to rotate smoothly.

5. Claims 8, 9, 25, 26, and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toedt in view of Suska.

Toedt does not disclose that the bushing is made of a polymer. Suska teaches using a plastic bushing instead of a metal bushing in hinges. Suska teaches that plastic bearings are longer lasting, non-corrosive, smoother, and quieter (see col. 1, lines 18-53). Suska teaches that

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the bearing can be made of a polymer or can have a coating (laminate, col. 5, lines 23-27). Regarding claims 38 and 39, Suska also teaches making the bushing with a cylindrical sleeve that is received within at least one of the knuckles to provide radial support as well as to seal dirt from entering the knuckles. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the bushing of Toedt by making it of a polymer or with a coating (and with the sleeve) as taught by Suska to provide a longer lasting, non-corrosive, smoother, and quieter bushing (that has radial support and seals dirt from entering the knuckles).

6. Claims 12-14 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toedt in view of Gidseg (4,864,691).

Toedt does not specify the material of the knuckles. Gidseg teaches art equivalent materials for hinge knuckles (col. 11, lines 32-42). Gidseg teaches metal, polymers, and ceramics as art equivalent material for hinges. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make the knuckles of Toedt out of metal, ceramic, or polymers as such are taught to be art equivalent hinge materials by Gidseg.

## Response to Arguments

7. Applicant's arguments with respect to claims 1-36 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 703-305-0882. The examiner can normally be reached on M-F (9-6:30), with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703-308-3179. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-8729327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1113.

Alison K. Pickard

Examiner Art Unit 3676

AP

March 22, 2003